

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for isolating ingredients from biological material, comprising the steps of:
 - a) electroporating biological material,
 - b) separating off cell juice from the electroporated biological material,
 - c) subjecting the electroporated biological material to an alkaline extraction treatment in which ingredients of said biological material are dissolved out of said material by contacting the material with at least one suitable solvent at a pH of from about 7 to about 14 to produce an extract,
 - d) obtaining the ingredients of the biological cell material in the cell juice and in the extract.
2. (Previously Presented) The method as claimed in claim 1, wherein the biological material in step a) is subjected to a high voltage field in a conductive medium.
3. (Previously Presented) The method as claimed in claim 1, wherein, in step b), the separation of the cell juice from the biological material is effected by mechanical loading.
4. (Previously Presented) The method as claimed in claim 3, wherein mechanical pressurization of the biological material is always less than 2 Mpa.
5. (Previously Presented) The method as claimed in claim 1, wherein step b) takes place in a screw.
6. (Previously Presented) The method as claimed in claim 1, wherein, in step b), the biological material is supplied with at least one auxiliary substance.

7. (Previously Presented) The method as claimed in claim 1, wherein step c) is carried out at a temperature of from 0 to 65°C.
8. (Previously Presented) The method as claimed in claim 1, wherein the biological material comprises at least one of sugar beet (*Beta vulgaris*) and sugar beet chips.
9. (Previously Presented) The method as claimed in claim 1, wherein the biological material comprises chicory.
10. (Previously Presented) A device for isolating ingredients from biological material according to the method as claimed in claim 1, said device comprising at least one appliance for electroporation (1) and at least one extractor (8), wherein at least one full screw (5) for receiving the electroporated biological material is arranged between the appliance for the electroporation (1) and the extractor (8).
11. (Previously Presented) The device as claimed in claim 10, wherein the at least one full screw (5) is designed as a conveyor screw and wherein a first section of the screw which is designed for receiving the electroporated biological material is formed at a lower point, and a second section of the screw which is designed for releasing the conveyed biological material is formed at an upper point, of a gradient which exists between said first and said second sections.
12. (Previously Presented) The device as claimed in claim 10, further comprising at least one metering device (6) for metering auxiliary substances.
13. (Previously Presented) The method as claimed in claim 3, wherein said mechanical loading comprises tumbling.
14. (Previously Presented) The method as claimed in claim 5, wherein said screw is a full screw.

15. (Previously Presented) The method as claimed in claim 6, wherein the auxiliary substance is at least one of lime and milk of lime.

16. (Previously Presented) The method as claimed in claim 7, wherein step c) is carried out at a temperature of from 45 to 60°C.

17. (Previously Presented) The device as claimed in claim 10, wherein the full screw is threaded and at least one of an outer jacket of said screw and said screw threads is perforated.

18. (Currently Amended) A method for isolating ingredients from a biological material selected from the group consisting of chicory and sugar cane, said method comprising the steps of:

- a) electroporating the biological material;
- b) separating off cell juice from the electroporated biological material;
- c) extracting the biological material by dissolving ingredients out of the material upon contacting the material with at least one suitable solvent; and
- d) obtaining the ingredients of the biological cell material in the cell juice and in the extract.

19. (Previously Presented) The method as claimed in claim 18, wherein the biological material in step a) is subjected to a high voltage field in a conductive medium.

20. (Previously Presented) The method as claimed in claim 18, wherein, in step b), the separation of the cell juice from the biological material is effected by mechanical loading.

21. (Previously Presented) The method as claimed in claim 20, wherein said mechanical loading comprises tumbling.

22. (Previously Presented) The method as claimed in claim 18, wherein mechanical pressurization of the biological material is always less than 2 Mpa.

23. (Previously Presented) The method as claimed in claim 18, wherein step b) takes place in a screw.
24. (Previously Presented) The method as claimed in claim 23, wherein said screw is a full screw.
25. (Previously Presented) The method as claimed in claim 18, wherein, in step b), the biological material is supplied with at least one auxiliary substance.
26. (Previously Presented) The method as claimed in claim 25, wherein the auxiliary substance is at least one of lime and milk of lime.
27. (Previously Presented) The method as claimed in claim 18, wherein step c) is carried out at a temperature of from 0 to 65°C.
28. (Previously Presented) The method as claimed in claim 27, wherein step c) is carried out at a temperature of from 45 to 60°C.